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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/775,445

02/09/2004

Aland B. Adams

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7590

10/03/2006

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FORT COLLINS, CO 80527-2400

EXAMINER

CHANNAVAJJALA, SRIRAMA T

ART UNIT

PAPER NUMBER

2166

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)	
10/775,445	ADAMS, ALAND B.	
Examiner	Art Unit	
Srirama Channavajjala	2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2/8/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-20 are pending in this application.

Drawings

2. The Drawings filed on 2/9/2004 are acceptable for examination purpose.

Information Disclosure Statement

3. The information disclosure statement filed on 2/8/2004 is in compliance with the provisions of 37 CFR 1.97, and has been considered and a copy is enclosed with this Office Action.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

As set forth in MPEP 2106(II)A:

Identify and understand Any Practical Application Asserted for the Invention The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373, 47USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting

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point for future investigation or research (*Brenner v. Manson*, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); *In re Ziegler*, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention, i.e., why the applicant believes the claimed invention is useful.

Apart from the utility requirement of 35 U.S.C. 101, usefulness under the patent eligibility standard requires significant functionality to be present to satisfy the useful result aspect of the practical application requirement. See *Arrhythmia*, 958 F.2d at 1057, 22 USPQ2d at 1036. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make the invention eligible for patenting. For example, a claim directed to a word processing file stored on a disk may satisfy the utility requirement of 35 U.S.C. 101 since the information stored may have some "real world" value. However, the mere fact that the claim may satisfy the utility requirement of 35 U.S.C. 101 **does not mean that a useful result is achieved under the practical application requirement. The claimed invention as a whole must produce a "useful, concrete and tangible" result to have a practical application.**

4. **Claims 1-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

5. Regarding claim 1,11, "A method, comprising: using a driver to filter read requests initiated by a client computer, wherein if a file that is the subject of a read

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request is referenced by a local file system of the client computer, the driver routes the read request to the local file system, and if a file that is the subject of a read request is not referenced by the local file system, the driver routes the read request to a remote file system; routing to the local file system all requests to write files of the remote file system, thereby causing a file that is the subject of such a request to be written to the local file system” is interpreted in light of the specification particularly 5-8, fig 2-3 is directed to” “abstract idea” because all of the elements in the claim 1,11 would reasonably be interpreted by one of ordinary skill in light of the disclosure as software, such that the method is software, per se , is “non-statutory subject matter” and **claim 1,11** do not have “**practical application**” because the “final result” by the claimed invention in the claim 1,11 elements particularly “if a file that is the subject of a read request is not referenced by the local file system, the driver routes the read request to a remote file system; routing to the local file system all requests to write files of the remote file system, thereby causing a file that is the subject of such a request to be written to the local file system” is not producing “ useful, tangible and concrete” and therefore, claim 1,11 is a non-statutory subject matter.

The claimed invention is subject to the test of State Street, 149 F.3d at 1373-74, 47 USPQ2d at 1601-02. Specifically State Street sets forth that the claimed invention must produce a “**useful, concrete and tangible result.**” The **Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility** states in section IV C. 2 b. (2) (on page 21 in the PDF format):

The tangible requirement does not necessarily mean that a claim must either be tied to a particular machine or apparatus or must operate to change

articles or materials to a different state or thing. However, the tangible requirement does require that the claim must recite more than a § 101 judicial exception, in that the process claim must set forth a practical application of that § 101 judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77 (invention ineligible because had “no substantial practical application.”).

Claim 1,11, is merely “software routines, or actions ” considered to be non functional descriptive material, but no more than a **program code** or a data structure, furthermore, “routing to the local file system all requests to write files of the remote file system, thereby causing a file that is the subject of such a request to be written to the local file system” is treated to be “broad functionality”, the claim[s] do not specify that the real-world result [neither output nor displayed], hence, claims 1,11 does not output useful, concrete and tangible result. Thus the claimed result is not tangible and thus the claimed result is not a “useful, concrete and tangible result.” The court in State Street noted that the claimed invention in Alappat constituted a practical application of an abstract idea because it produced *a useful, concrete and tangible result* the display of a smoothed heart beat to a system user. The Federal Circuit further ruled that it is of little relevance whether a claim is directed to a machine or process for the purpose of a § 101 analysis. AT&T, 172 F.3d at 1358, 50 USPQ2d at 1451 (see the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, Annex II).

The examiner reviewed the specification pages 3-8 but was unable to find a practical real-world use of the result (***if a file that is the subject of a read request is not referenced by the local file system, the driver routes the read request to a***

remote file system; routing to the local file system all requests to write files of the remote file system, thereby causing a file that is the subject of such a request to be written to the local file system"). If the applicant is able to find one and inserts it into the claims provide the location the element is found in the specification.

Claims 2-7,12-19, depend from claims 1,11 is also rejected in the analysis above.

6. As to claim 8 "A method, comprising: receiving a client computer's request to read a file; by means of a driver of the client computer, routing the read request to a remote file system; and upon receiving the client computers request to write to the file, writing the file to a local file system of the client computer" is interpreted in light of the specification particularly 5-8, fig 2-3 is directed to "abstract idea" because all of the elements in the claim 8 would reasonably be interpreted by one of ordinary skill in light of the disclosure as software, such that the method is software, per se , is "non-statutory subject matter" and ***claim 8*** do not have "***practical application***" because the "final result" by the claimed invention in the claim 8 elements particularly ***"by means of a driver of the client computer, routing the read request to a remote file system; and upon receiving the client computers request to write to the file, writing the file to a local file system of the client computer"*** is not producing "useful, tangible and concrete" and therefore, claim 8 is a non-statutory subject matter.

The claimed invention is subject to the test of State Street, 149 F.3d at 1373-74, 47 USPQ2d at 1601-02. Specifically State Street sets forth that the claimed invention must produce a ***“useful, concrete and tangible result.”*** The Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility states in section IV C. 2 b. (2) (on page 21 in the PDF format):

The tangible requirement does not necessarily mean that a claim must either be tied to a particular machine or apparatus or must operate to change articles or materials to a different state or thing. However, the tangible requirement does require that the claim must recite more than a § 101 judicial exception, in that the process claim must set forth a practical application of that § 101 judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77 (invention ineligible because had “no substantial practical application.”).

Claim 8 is merely routing the read request, and writing the file to a local file system is just “software routines, or actions ” considered to be non functional descriptive material, but no more than a ***program code*** or a data structure, furthermore, ***“by means of a driver of the client computer, routing the read request to a remote file system; and upon receiving the client computers request to write to the file, writing the file to a local file system of the client computer”*** is treated to be “broad functionality”, the claim[s] do not specify that the real-world result [neither output, store nor displayed], hence, claims 8 does not output useful, concrete and tangible result. Thus the claimed result is not tangible and thus the claimed result is not a “useful, concrete and tangible result.” The court in State Street noted that the claimed invention in Alappat constituted a practical application of an abstract idea because it produced a

useful, concrete and tangible result the display of a smoothed heart beat to a system user. The Federal Circuit further ruled that it is of little relevance whether a claim is directed to a machine or process for the purpose of a § 101 analysis. AT&T, 172 F.3d at 1358, 50 USPQ2d at 1451 (see the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, Annex II).

The examiner reviewed the specification pages 3-8 but was unable to find a practical real-world use of the result ("***by means of a driver of the client computer, routing the read request to a remote file system; and upon receiving the client computers request to write to the file, writing the file to a local file system of the client computer***"). If the applicant is able to find one and inserts it into the claims provide the location the element is found in the specification.

Claims 9-10, depend from claims 8 is also rejected in the analysis above.

Regarding claim 20, "A system, comprising: a plurality of client computers, each of which maintains a local file system for accessing local files; a remote machine providing access to remote files; and on each client computer, a driver to i) filter read requests initiated by the client computer, ii) route a read request to the local file system of the client computer when a file that is the subject of the read request is maintained in the local files of the client computer, and otherwise route the read request to a remote file system for accessing the remote files, and- iii) route to the local file

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system of the client computer, all requests to write the remote files” is interpreted in light of the specification particularly 5-8, fig 2-3 is directed to” “abstract idea” because all of the elements in the claim 8 would reasonably be interpreted by one of ordinary skill in light of the disclosure as software, such that the method is software, per se , is “non-statutory subject matter” and **claim 20** do not have “**practical application**” because the “final result” by the claimed invention in the claim 20 elements particularly “ i) filter read requests initiated by the client computer, ii) route a read request to the local file system of the client computer when a file that is the subject of the read request is maintained in the local files of the client computer, and otherwise route the read request to a remote file system for accessing the remote files, and- iii) route to the local file system of the client computer, all requests to write the remote files” is not producing “ useful, tangible and concrete” and therefore, claim 20 is a non-statutory subject matter.

The claimed invention is subject to the test of State Street, 149 F.3d at 1373-74, 47 USPQ2d at 1601-02. Specifically State Street sets forth that the claimed invention must produce a “**useful, concrete and tangible result.**” The **Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility** states in section IV C. 2 b. (2) (on page 21 in the PDF format):

The tangible requirement does not necessarily mean that a claim must either be tied to a particular machine or apparatus or must operate to change articles or materials to a different state or thing. However, the tangible requirement does require that the claim must recite more than a § 101 judicial exception, in that the process claim must set forth a practical application of that § 101 judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72,

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175 USPQ at 676-77 (invention ineligible because had “no substantial practical application.”).

Claim 20 is merely read requests initiated by client computer, route a read request, route to the local file system... just “software routines, or actions ” considered to be non functional descriptive material, but no more than a **program code** or a data structure, furthermore, “**i) filter read requests initiated by the client computer, ii) route a read request to the local file system of the client computer when a file that is the subject of the read request is maintained in the local files of the client computer, and otherwise route the read request to a remote file system for accessing the remote files, and- iii) route to the local file system of the client computer, all requests to write the remote files**” is treated to be “broad functionality”, the claim[s] do not specify that the real-world result [neither output, store nor displayed], hence, claims 20 does not output useful, concrete and tangible result. Thus the claimed result is not tangible and thus the claimed result is not a “useful, concrete and tangible result.” The court in State Street noted that the claimed invention in Alappat constituted a practical application of an abstract idea because it produced a *useful, concrete and tangible result* the display of a smoothed heart beat to a system user. The Federal Circuit further ruled that it is of little relevance whether a claim is directed to a machine or process for the purpose of a § 101 analysis. AT&T, 172 F.3d at 1358, 50 USPQ2d at 1451 (see the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, Annex II).

The examiner reviewed the specification pages 3-8 but was unable to find a practical real-world use of the result (***"i) filter read requests initiated by the client computer, ii) route a read request to the local file system of the client computer when a file that is the subject of the read request is maintained in the local files of the client computer, and otherwise route the read request to a remote file system for accessing the remote files, and- iii) route to the local file system of the client computer, all requests to write the remote files"***). If the applicant is able to find one and inserts it into the claims provide the location the element is found in the specification.

For "General Analysis for Determining Patent-Eligible Subject Matter", see 101 Interim Guidelines as indicated below:

<<<http://www.uspto.gov/web/offices/pac/dapp/ogsheet.html>>>

No new matter should be entered

Claims 1,8,20, preamble merely directed to "A method, A system", but fail to include a ***general description in the preamble***"

Claim 11, preamble reads " One or more computer-readable mediums having stored....."

Remarks:

Examiner suggests that the applicant consider amending claims 1,8,20 preamble to include general description. See MPEP 608.01 Claims: any claim should contain the following order: (a) a preamble comprising a general description of all the elements of steps of the claimed combination which are convention or known.....

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Examiner suggests claim 11 should read " A computer-readable storage medium.....

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claim 1, 8,11,20 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As to claims 1,8,11,20, the limitation "a driver to filter read requests" is not described in the specification. Upon reviewing the specification [page 4-5, 0014-0017], examiner found that there is no support for "a driver to filter read requests".

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1,8,11,20 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claims 1,8,11,20, limitation "a driver to filter read requests" is not clear what is meant by "driver to filter read requests", and is not defined in the specification, for compact prosecution, examiner assumes driver to filter read requests is part of the operating system because it allow the underlying file system to support read and write operations and is treated as explained above in the office action.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. ***Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Bober US Patent No. 6718372, filed on April 6, 2004***

12. As to claim 1, 11, 20, Bober teaches a system which including 'a method, comprising: 'using a driver to filter read requests initiated by a client computer' [fig 3, element 50] filter driver corresponds to Bober's fig 3, element 66, client computer corresponds to fig 3, element 16, wherein if a file that is the subject of a read request is referenced by a local file system of the client computer [col 3, line 6064, line 67, col 4, line 1-2, line 45-51], Bober specifically suggests filter driver element 66 allows to

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accesses to files in the file system, further read and write operations or commands are supported by the operating system or operating system functions to create a file for reading or writing as detailed in col 4, line 49-51; ' the driver routes the read request to the local file system' [, and if a file that is the subject of a read request is not referenced by the local file system, the driver routes the read request to a remote file system' [col 4, line 60-66], Bober specifically suggests filter driver element on node 16 issues read commands to the distributed file system or network file system particularly node element 18 as detailed in col 4, line 60-66; 'routing to the local file system all requests to write files of the remote file system, thereby causing a file that is the subject of such a request to be written to the local file system' [col 5, line 3-9, line 17-19], Bober specifically suggests in the network file system's client 50 on node 16 connected to the network server element 56 on node 18 as detailed in fig 3, also, Bober suggests both read and write operations or requests to the file by the application 48 as detailed in col 5, line 3-6. 'a plurality of client computers, each of which maintains a local file system for accessing local files' [[fig 3, col 4, line 23-30]; 'a remote machine providing access to remote files' [col 6, line 13-18].

13. As to claim 2, 12, 15, Bober disclosed 'wherein said files that are the subject of said read and write requests comprise operating system files' [col 4, line 47-50, col 16, line 53-57, col 27, line 48-56], it is noted that Bober specifically suggests Unix, Windows 95/98/NT/2000 operating systems [col 16, line 53-57]

14. As to claim 3, 14, Bober disclosed 'if a read request is routed to the remote file system, and if the file to be read is of a predetermined type [col 4, line 49-50, col 12, line 46-51], then automatically causing the file to be written from the remote file system to the local file system' [col 4, line 54-56].

15. As to claim 4, 13, 16, Bober disclosed 'predetermined type of files comprises configuration files' [col 12, line 46-51].

16. As to claim 5, Bober disclosed 'remote file system comprises a UNIX file system' [fig 6, element 201-1, 201-2].

17. As to claim 6, Bober disclosed 'presenting a user of the client computer a uniform view of the files of the local and remote file systems' [col 29, line 14-23, fig 9].

18. As to claim 7, Bober disclosed 'filtering said write requests via said driver' [col 5, line 3-6].

19. Bober teaches a system which including ' a method, comprising: 'receiving a client computer's request to read a file' [fig 3, col 4, line 12-14], Bober specifically suggests client computer node 16 can access files both read and write as detailed in col 4, line 12-14];

' by means of a driver of the client computer, routing the read request to a remote file system' [col 4, line 12-16, line 23-26, line 58-64], Bober specifically suggests client computer, server computer have filter driver as detailed in fig 3, further, filter driver in the client computer node issues read or write request to the remote file system as detailed in line 23-26, line 58-64;

' upon receiving the client computers request to write to the file, writing the file to a local file system of the client computer' [col 4, line 54-64].

20. As to claim 9, Bober disclosed 'prior to routing the read request to the remote file system, determining the file to be read is not referenced by the local file system' [col 5, line 3-10].

21. As to claim 10, Bober disclosed 'after writing the file to the local file system, routing all further requests to read the file to the local file system' [col 6, line 40-46].

22. As to claim 18, Bober disclosed 'remote file system comprises a UNIX distributed file system' [col 2, line 8-10, line 42-46, col 4, line 26-30].

23. As to claim 19, Bober disclosed 'remote file system comprises a UNIX network file system' [col 2, line 8-10, line 42-46].

Conclusion


The prior art made of record

- a. US Patent . No. 6718372

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srirama Channavajjala whose telephone number is 571-272-4108. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam, Hosain, T, can be reached on (571) 272-3978. The fax phone numbers for the organization where the application or proceeding is assigned is 571-273-8300 Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

sc
Patent Examiner.
September 21, 2006.


SRI RAMA CHANNAVAJJALA
PRIMARY EXAMINER